

### REMARKS/ARGUMENT

The Office Action of January 22, 2009 has been reviewed and the comments therein were carefully considered. The present application includes claims 1-22. Claims 1-22 have been rejected by the Examiner. By this response, independent claims 1, 7, and 13 have been amended to recite in various forms that the function is changed directly by the remotely transmitted command. Further, appropriate claims depending from the independent claims have been amended, where necessary, to reflect the changes in the independent. Such systems and methods are not found in the cited art, as explained below, and, thus, for at least these reasons, claims 1-22 should be allowable.

### REJECTIONS UNDER 35 USC § 103(a)

Claims 1-3, 5-8, 11-19, have been rejected under 35 U.S.C. 103(a) as being unpatentable over McCabe et al. (U.S. Patent No. 5,868,676) in view of Gaughan et al. (U.S. Patent No. 5,589, 893) and further in view of Goto. (U.S. Patent No. 5,832,323). Claims 1, 7, and 13 are independent claims. The Applicant traverses this rejection for at least the following reasons.

### CLAIM 1

With respect to claim 1, McCabe relates a system and method to input a variable to calculate maximum velocity curve in an ultrasound system. A user interface may be used to alter the input of a percentage used in a formula to calculate the maximum velocity curve. A trackball may be used to select the input P in the ultimate calculation of the maximum velocity curve. (McCabe, col. 8, lns 1-10.) Thus the calculation of the maximum velocity curve is a function of the variable P.

The system of McCabe may include a trackball, but that trackball is simply used to adjust input P, a variable, in the exponent of an equation that is used to calculate S, a scale factor which

is used to fine tune the maximum velocity curve, rather than to remotely transmitting a direct functional command directly to the imaging system as recited in the currently amended claim. (See McCabe, col. 7, lns. 36-40, 59-67.) Thus, in McCabe a setting can be changed in an exponent of an equation, but a function may not be directly changed. The Office Action, without the required support, states: "A function with one set of values is by definition a different function than one with a second set of values." (Office Action, page 5.) Applicant respectfully submits that the Office Action is apparently defining a mathematical definition of a function which is variable so related to another that for each value assumed by one there is a value determined for the other. Thus in McCabe, the P variable is part of an equation that calculates the velocity curve. Therefore, the change in the velocity curve is a function of the P variable. In contrast to the features of claim 1, the velocity curve is a mathematical function of the P variable, the variable P does not directly control a functional command of the diagnostic imaging system as in the instant application.

The Office Action also cites to McCabe for the use of a trackball in selecting amongst configuration settings. However, the selection of a configuration is simply a selection for the display of certain parameters. For example, in McCabe, if a carotid artery configuration is selected, four parameters are calculated and displayed: maximum velocity, minimum velocity, Doppler flow angle and heart rate. (McCabe, col. 8, lns. 40-43) Selection of a configuration is not directly controlling a function of the diagnostic imaging machine.

Finally, the Office Action cites to a section in McCabe whereby the trackball is used to move a delimiter and thereby adjust a time period for a parameter calculation. Again, the adjustment of a time period to be used in a calculation of a parameter which is then displayed is not directly controlling a function of the diagnostic imaging machine. Nowhere does McCabe

discloses or teach transmitting a command to directly change a function of the imaging system. Further, as noted by the Examiner, McCabe does not disclose that the trackball generates a command through rotational translation of the trackball motion. Additionally, McCabe does not disclose that the trackball device is remote from the ultra sound system as recited in currently amended claim 1. Neither Goto nor Gaughan cure the deficiencies of McCabe.

Thus, for at least these reasons, Applicant submits that McCabe, Gaughan or Goto, taken alone or in theoretical combination, teaches or reasonably suggests all the limitations of claim 1. Claims 2-6 are dependent claims which ultimately depend from independent claim 1 and should be allowable at least for the reasons stated.

#### **CLAIM 7**

As discussed above, nowhere does McCabe disclose transmitting a direct functional command to the imaging system. Rather, McCabe discloses changing variables in calculating maximum velocity curves, and other parameters. These parameters are a function of the changed variables. McCabe does not disclose the cited feature in claim 7 of transmitting a direct functional command, rather McCabe disclose calculating maximum velocity curve or other parameters which are functions of the changed variables. Neither Goto nor Gaughan cure the deficiencies of McCabe.

Thus, for at least these reasons, Applicant submits that McCabe, Gaughan or Goto, taken alone or in theoretical combination, teaches or reasonably suggest all the limitations of claim 7. Claims 8-12 are dependent claims which ultimately depend from independent claim 7 and should be allowable at least for the reasons stated.

### CLAIM 13

As discussed above, the system of McCabe may include a trackball, but nowhere does McCabe disclose that the trackball device is in a remote handheld device and remote transmits a direct functional command to the medical diagnostic imaging system.

Currently amended claim 13 recites a trackball that controls a diagnostic imaging system is based on the rotational movement of the trackball. Further, currently amended claim 13 recites that the handheld trackball device comprises a transmitter for remotely transmitting a direct functional command from a remote handheld trackball device to a diagnostic imaging system based on rotational motion of the trackball. As discussed above, McCabe does not disclose the cited feature in claim 13 of remotely transmitting a direct functional command; rather McCabe discloses changing variables and calculating maximum velocity curve or other parameters which are functions of the changed variables. Neither Goto nor Gaughan cure the deficiencies of McCabe.

Thus, for at least these reasons, the Applicant submits that McCabe, Gaughan nor Goto, taken alone or in theoretical combination, teaches or reasonably suggest all the limitations of claim 13. Claims 14-22 are dependent claims which ultimately depend from independent claim 13 and should be allowable at least for the reasons stated.

.Therefore, the Applicant respectfully submits that the rejections in the non final Office Action have been overcome, and the claims should be allowed over the cited art of record.

### CONCLUSION

In general, the Office Action makes various statements regarding the pending claims and the cited references that are now moot in light of the above. Thus, the Applicants will not address such statements at the present time. However, the Applicants expressly reserve the right to challenge such statements in the future should the need arise (e.g., if such statement should become relevant by appearing in a rejection of any current or future claim).

It is submitted that the present application is in condition for allowance. Applicants respectfully request reconsideration of the pending claims and a finding of their allowability. A notice to this effect is respectfully requested. If the Examiner has any questions or the Applicant can be of any assistance, the Examiner is invited and encouraged to contact the Applicant at the number below.

The Commissioner is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of GTC, Account No. 502401.

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Respectfully submitted,

/Dennis P. Hackett/

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